THURSDAY, NOVEMBER 29, 1888.

HAUPTMANN ON HARMONY AND METRE.

The Nature of Harmony and Metre. By Moritz Hauptmann. Translated and Edited by W. E. Heathcote, M.A. (London: Swan Sonnenschein and Co., 1888.)

THE author of this singular book was a noted man in the German musical world. He was not only an eminent violinist (pupil and intimate friend of Spohr), but a composer of merit, and, what is more to our purpose here, a great authority on the theory of music and the laws of composition. In 1842 he was appointed, on Mendelssohn's recommendation, Cantor and Musik-Director of the celebrated Thomas-Schule at Leipzig, and Professor of Counterpoint and Composition at the new Conservatorium in that city, filling these posts till his death in 1868. He was undoubtedly the foremost teacher in Europe, and his legion of pupils comprised many who afterwards became musicians of great eminence, including F. David, Curschmann, Burgmüller, the Baches, Joachim, von Bülow, Mr. Cowen, and Sir Arthur Sullivan. He was, moreover, a highly educated man and a Doctor of Philosophy. Hence any writings on music by him could not fail to command attention. His best-known work is a series of letters to his intimate friend, Hauser, the Director of the Conservatoire at Munich, full of spirit, admirable criticism, and deep musical knowledge.

Hauptmann's scientific turn of mind led him to study earnestly the problem which has occupied so many thinkers ever since music has had any consistent form—namely, to discover how the structure which, for some reason or other, seemed most appropriate for it, could be accounted for and explained on philosophical principles. The Greeks talked vaguely of the music of the spheres, and learned men of later days referred it to arithmetical proportions; both with as much reason as modern English musicians join in the *ignis-fatuus* hunt after "natural systems of harmony." Hauptmann sought the explanation in the depths of German metaphysics, and having satisfied his own mind on the matter, he brought out, in 1853, an elaborate volume which he called "Die Natur der Harmonik und der Metrik, zur Theorie der Musik," of which the book now before us is an English version. It appears by a part of the original preface (omitted by the present translator) that he had already introduced the system into his "musikalisch-theoretischen Cursus," and there is no doubt it attracted considerable attention in Germany. A second edition of the book was published in 1873.

But in the meantime the matter had assumed a new shape, through the labours of another German philosopher, Helmholtz. He had the advantage over Hauptmann of a large practice in experimental physics; hence it occurred to him to attack the problem on the physical side, and the result was the well-known epoch-making work, published in 1863, "Die Lehre von den Tonempfindungen als physiologische Grundlage für die Theorie der Musik." He investigated, far more thoroughly than anyone had done before, the physical properties of musical sounds, and their physiological effects on the ear. He showed, with the aid of the facts thus obtained, that the structure of music generally in use was due partly to the nature of the sounds of which it was composed, and partly to artificial considerations which had presented themselves to musical composers on æsthetic and artistic grounds. This swept away the necessity for any abstruse metaphysical speculations; and we strongly suspect that if Hauptmann had waited till Helmholtz's discoveries had been made known, the present treatise would never have appeared.

It is a question, under these circumstances, how far it was worth while to reproduce the book in English; however, here it is; and anyone interested in musical metaphysics, or metaphysical music, and who is unable to read the original, may puzzle over it to his heart's content. It is a handsome volume, and the translation is (so far as we have been able to compare it) carefully and intelligently done. Some of the language may seem uncouth, and much of it obscure, but this is inevitable from the nature of the original, the rendering of which must often have been a tough job. The translator has prefixed an introductory essay, and there is an appendix, entitled "A Short Analysis of Hauptmann's Treatise," which, as we do not find it in the original, we presume is the translator's also, though he does not say so.

The main feature of the work is the application, to musical structure, of the philosophy of Hegel. It would be useless here to attempt to discuss this elaborate subject, or even to describe it. All we can do is to insert a few extracts to give an idea of what sort of thing a person must expect who would take up the work.

As a general point of departure, the translator tells us that—

> "The fundamental idea of the philosophy is that every notion—as key, scale, seventh chord, resolution, and so on—is made up after this fashion, *i.e.* that it possesses three elements, involving an antithesis and a reconcilement, and that one of the three elements is the root from which the other two, and so the whole construction, spring. This, Hauptmann regards as self-evident, and it is the basis of Hegelian metaphysics."

The author then says:—

> "For the first step it will only be requisite to acquire an inward conception of the notion of the formative process in its wholeness, in the unity of its three elements with which we become acquainted in their first utterance, as the intervals of the octave, fifth, and third. This notion is and remains everywhere the same, in every formation and transformation. It is the notion that something, which at first subsists for intuition in immediate totality (octave), parts from itself into its own opposite (fifth), and that then this opposite is in its turn abolished to let the whole be produced again as one with its opposite (triad), as a whole correlated in itself. Going in the universal sense of this notion, we shall soon be obliged to grant that it no less than comprehends in itself the elements of all knowing, and that anything further for knowledge is not conceivable (*dass ein Weiteres für die Erkenntniss nicht mehr denkbar ist*)."

Sound is defined as

> "the coming to be of the being which subsists absolutely during rest, and which is alternately abolished and restored. Not being in self, or dead persistence in rest, nor yet being out of self (*ausser-sich-seyn*) in the motion, is sounding, but coming to self (*zu-sich-kommen*)."

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The octave is

> "the expression for the notion of identity, unity, or equality with self."

The fifth

> "contains acoustically the determination that something is divided within itself, and thereby the notion of duality and inner opposition (*sich selbst Entgegengesetztes*)."

The third contains

> "the notion of identification of opposites; of duality as unity."

Of the scheme of a major key, as derived from triad construction, it is said:—

> "The organic property of a membered whole can never be represented exhaustively, either by symbols and numbers or by words; it can only be spiritually indicated to intellectual feeling, *i.e.* reason, that meets it half-way. . . . . Now, because this notion has to unite both union and separation, it can only be fulfilled in endlessly continued passage into contrary and comprehension of all opposites. Thus it must be conceived as an infinite process, and consequently as the notion of eternal becoming, living or being real. This is Nature, who, produced as duality from the prime unity (*Ureinheit als Zweiheit hervorgegangen*), and busied continually in making her opposites be absorbed into one another, is live being itself and reality."

This is the sort of way in which harmony is treated; and the same system is adopted in the latter part of the book in regard to metre and rhythm. Most elaborate explanations, illustrated with tables and diagrams, are given of all varieties of time, rhythm, and accent, and they are all etherealized in the same transcendental style. For example, in regard to four-timed metre, we are told that—

> "It is this inner reconcilement of separation in unity and unity in separation, the completed negation of every negativing excluding element, that speaks to us here in metrical determination as the essence of the triad, but in combinations of notes as the perfection of harmony; and generally in any guise of phenomenon as the perfected notion of determinate reality."

But we must, in justice to the book, explain that it is not entirely given up to Hegel. The translator properly remarks that, independently of the theory involved, it contains an account, written by a skilful musician and experienced teacher, of harmony and metre, in which the received rules are explained on general principles, while upon particular points new and unexpected light is frequently cast. This is true, for, though Hauptmann loved Hegel well, he loved music more, and nothing could repress his desire to amplify his explanations upon it. It is quite delightful to find him now and then throwing the metaphysics overboard, and breaking out into intelligible common-sense language on the facts and rules of harmony. One can only regret that this sort of thing is not general instead of exceptional.

We have good precedent for this regret. Hauptmann's book was well known to Helmholtz. He studied it carefully, made himself master of all its intricacies, and commented on many of his predecessor's statements and opinions with much respect. Yet what judgment did he pass upon Hauptmann's work as a whole? We will give the passage in the original, as it is really a most true and effective criticism. He says (original edition, p. 427):—

> "Ich kann mich nur dem Bedauern anschliessen, welches C. E. Naumann ausgedrückt hat, dass so viele feine musikalische Anschauungen, welche dieses Werk enthält, unnöthiger Weise hinter der abstrusen Terminologie der Hegel'schen Dialectik versteckt und deshalb einem grösseren Leserkreise ganz unzugänglich sind."

It is, indeed, a great pity that so much excellent musical matter, so many "refined musical views," as this work contains, should be hidden in such an atmosphere of impenetrable transcendental fog, and thus rendered inappreciable by any large circle of readers.

There is another reason which adds seriously to the difficulty of understanding these portions—that is, the use of a complicated system of alphabetical letters in varied types to express musical notes, chords, and passages, instead of the ordinary musical notation. The latter conveys its idea at a single glance; the former requires mental labour which is most wearisome. It is true the author explains that he wants in some cases greater accuracy than the ordinary notation will give; but this is obtained at a fearful sacrifice of clearness and intelligibility, and surely the object might have been accomplished in some less repulsive manner.

It seems odd that the translator, in his elaborate explanatory introduction, never mentions or notices Helmholtz in any way. One would hardly have expected that in the present day, when the science of music has come to be based chiefly on Helmholtz's investigations, a philosophical essay on the subject could have been penned without some allusion to them. There are many passages where the comparison seems invited; for example, Mr. Heathcote says: "The science of music is concerned more with the form than the materials." This is directly at variance with the work of Helmholtz, who bases all his science on the nature of the materials of music—namely, musical sounds—leaving the form to develop itself therefrom. Again, in explaining to us how we are to proceed to learn and follow out the Hegelian system, the translator says:—

> "Therefore, when musical sound is said to be unity, we are not to think of it as existing as it does now, and capable of being distinguished into chords, notes, and scales. . . . . Musical pitch, tone, or quality of sound, which depend upon the triad, must not be thought of as existing before the triad exists, and still less as contributing to the formation of the triad."

How different this is from the philosophy of Helmholtz, who demonstrates to us that the triad is a product directly springing out of the physical nature of musical sound!

To sum up, the book is a very remarkable one, the product of a great mind, and of a great authority on the subject it treats of. But we should fear that its interest to English readers will be very limited. The Hegelian portion of it, although, as the translator remarks, it may serve the metaphysician as an application of this peculiar philosophy to a concrete subject, can be of little use to the musician as an explanation of the principles of his art. And as to the technical musical matter, which is really very valuable, the way to render its value appreciable by the public would be to translate it, not merely into English, but into a kind of language with which musicians are familiar, and which ordinary minds would be able to comprehend.

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